What is claimed is:

1. A receiver for receiving a multi-carrier signal conveying data and reference signals having a first and second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

a processor for determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals;

a combiner for combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation.

2. A receiver according to claim 1, wherein the processor determines the estimation of the reliability of each set of extracted reference signals by a process of calculation.

3. A receiver according to claim 2, wherein the processor calculates the estimation using adjacent reference signals from each set of extracted reference signals.

4. A receiver according to claim 3, wherein the number of adjacent reference signals used in the calculation is between 1 and 7.

5. A receiver according to claim 2, 3 or 4, wherein the process of calculation determines the median of the reference signals.

6. A receiver according to claim 2, 3 or 4, wherein the process of calculation determines the mean of the reference signals.

7. A receiver according to any preceding claim, wherein the combiner applies a weighting to each extracted data signal prior to combining.

8.　A receiver according to any preceding claim, wherein the combiner combines the first and second set of extracted data signals in a first manner when the difference between the determined reliability of each set of reference signals is above a predetermined threshold, and for combining the

5　first and second set of extracted data signals in a second manner when the determined reliability difference of each set of reference signals is below the predetermined threshold.

9. A receiver according to claim 8, wherein the first manner of combining is a

10　maximal ratio combining (MRC).

10. A receiver according to claim 8, wherein the first manner of combining is an equal gain combining (EGC).

15　11. A receiver according to claim 8, 9 or 10, wherein the second manner of combining is by signal selection.

12. A receiver according to any of claims 1 to 11, wherein the processor is a filter.

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13.　A receiver according to any preceding claim, comprising at least three diversity branches.

14.　A receiver according to any preceding claim, adapted to receive

25　orthogonal frequency division multiplex (OFDM) signals.

15. A method of receiving a multi-carrier signal conveying data and reference signals at a receiver having a first and second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby

30　producing a first and second set of extracted data and reference signals, comprising:

determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals;

combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation.

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16. A method according to claim 15, wherein the step of determining an estimation comprises determining the estimation by a process of calculation.

17. A method according to claim 16, wherein the step of determining further

10 comprises calculating the estimation using adjacent reference signals from each set of extracted reference signals.

18. A method according to claim 17, wherein the step of determining comprises calculating the estimation using between 1 and 7 adjacent

15 reference signals.

19. A method according to claim 17 or 18, wherein the step of determining comprises determining the median of the reference signals.

20 20. A method according to claim 17 or 18 ,wherein the step of determining comprises determining the mean of the reference signals.

21. A method according to any of claims 15 to 20, further comprising applying a weighting to each extracted data signal prior to combining.

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22. A method according to any of claims 15 to 21, wherein the step of combining combines the first and second set of extracted data signals in a first manner when the difference between the determined reliability of each set of reference signals is above a predetermined threshold, and for

30 combining the first and second set of extracted data signals in a second manner when the determined reliability difference of each set of reference signals is below the predetermined threshold.

23. A method according to claim 22, wherein the first manner of combining performs a maximal ratio combining (MRC).

24. A method according to claim 22, wherein the first manner of combining performs an equal gain combining (EGC).

25. A method according to claim 22, 23 or 24, wherein the second manner of combining performs a signal selection.

26. A method according to any of claims 15 to 25, wherein the step of determining further comprises filtering the extracted reference signals.

27. A method according to any of claims 15 to 26, for receiving orthogonal frequency division multiplex (OFDM) signals.

28. A receiver substantially as herein described with reference to the accompanying drawings.

29. A method of receiving a multi-carrier signal substantially as herein described with reference to the accompanying drawings.